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Building Rapport and Earning the Surgical Patient's Trust in the Era of Social Distancing: Teaching Patient-Centered Communication During Video Conference Encounters to Medical Students

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BACKGROUND: Effective physician communication improves care, and many medical schools and residency programs have adopted communication focused curricula. The COVID-19 pandemic has shifted the doctor-patient communication paradigm with the rapid adoption of video-based medical appointments by the majority of the medical community. The pandemic has also necessitated a sweeping move to online learning, including teaching and facilitating the practice of communication skills remotely. We aimed to identify effective techniques for surgeons to build relationships during a video consult, and to design and pilot a class that increased student skill in communicating during a video consult.

METHODS: Fourth-year medical students matched into a surgical internship attended a 2-hour class virtually. The class provided suggestions for building rapport and earning trust with patients and families by video, role play sessions with a simulated patient, and group debriefing and feedback. A group debriefing generated lessons learned and best practices for telemedicine communication in surgery.

RESULTS: Students felt the class introduced new skills and reinforced current ones; most reported higher self-confidence in target communication skills following the

module. Students were particularly appreciative of opportunity for direct observation of skills and immediate faculty feedback, noting that the intimate setting was unique and valuable.

Several elements of virtual communications required increased focus to communicate empathy and concern. Proper lighting and positioning relative to the camera were particularly important and body movement required “narration” to minimize misinterpretation. A patient’s distress was more difficult to interpret; asking direct questions was recommended to understand the patient’s emotional state.

CONCLUSIONS: There is a need to teach video-conference communication skills to enable surgical teams to build rapport in this distinct form of consultation. Our training plan appears effective at engaging learners and improving skills and confidence, and identifies areas of focus when teaching virtual communication skills. (J Surg Ed 78:336–341. © 2020 Association of Program Directors in Surgery. Published by Elsevier Inc. All rights reserved.)

ABBREVIATIONS: CT, Computerized tomography PCP, Primary care physician SP Simulated patient

KEY WORDS: communication education, virtual education, patient-centered communication, video conference encounters, medical education

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COMPETENCIES: Patient Care, Professionalism, Interpersonal and Communication Skills

INTRODUCTION

Decades of research have demonstrated that effective physician-patient communication behaviors improve many aspects of care, including information exchange, patient satisfaction, treatment compliance, and physician referrals.¹⁻³ Medical school accreditation is contingent upon the inclusion of specific instruction in communication skills,⁴ and an ability to exchange information with patients and families is one of 6 core competencies of the Accreditation Council for Graduate Medical Education and the American Board of Medical Specialties.^{5,6} Medical schools and residency programs have adopted communication focused curriculums, in which students are taught techniques to achieve the major goals of communication: fostering relationships, exchanging information, and involving patients in decision-making.^{7,8}

The COVID-19 pandemic has precipitated an accelerated change in the physician-patient communication paradigm with the rapid adoption of video-based medical appointments (“telemedicine”), though the decade prior also saw an expansion in the use of telemedicine. A 2017 survey indicated that 76% of responding hospitals were implementing telemedicine appointments.⁹ The appeals of telemedicine include decreased patient and healthcare system spending, increased access to distant specialists, improved wait times,

and increased patient comfort.¹⁰ Given the COVID-19 crisis, many specialties have moved primarily to video-based appointments to minimize unnecessary exposures and Personal Protective Equipment (PPE) use.¹¹ Some recommend that telemedicine be integrated into surgical residency program curricula to augment resident training in the face of pandemic-induced reduction in caseload.¹²

The pandemic is also necessitating a sweeping move to online learning,^{13,14} including physician-patient communication skills education. A 2019 review suggested that digital communication teaching modalities were as effective for student learning as in-person practice, but called for further research to identify the most efficacious ways to teach communication skills virtually.¹⁵ Our objective was to design and pilot a virtual class for teaching video-based communication skills for fourth-year medical students entering surgical specialties.

METHODS

Fourth-year medical students matching into a surgical internship for 2020 to 2021 attended a 2-hour virtual class using Zoom technology (San Jose, CA); class agenda and handouts are in Appendix A. In a brief didactic session, facilitators shared best practices for building rapport and earning trust with patients and families by video, followed by a discussion of students’ patient-centered communication experience in person and virtually. Students then participated in two 15-minute role play sessions (Table 1) with a

TABLE 1. Role Play Instructions; Learner Performs as Surgical Resident

Learner	Simulated Patient
<p>Surgical Clinic Consult</p> <ul style="list-style-type: none">• You are to perform a history, discuss options, and make recommendations to the clinic patient.• The patient was referred by his PCP who identified a gallstone incidentally during a CT scan for vague abdominal pain.• He believes he will be scheduled for surgery.• Due to his complicated medical history, location and nature of the abdominal pain, and laboratory and radiographic work up, he is not indicated for cholecystectomy. <p>Surgical Complications</p> <ul style="list-style-type: none">• You assisted on a laparoscopic cholecystectomy for gallstone disease.• There was significant bleeding from the liver during the procedure, requiring conversion to an open procedure. The cholecystectomy was accomplished; however, the patient’s recovery will be prolonged.• The attending surgeon was called away; you are to update the family. Due to hospital-wide visiting restrictions (COVID-19) you must use video conferencing to explain the complication and its impact on care and recovery.	<ul style="list-style-type: none">• You feel loyal to your PCP whom you’ve known for years• You’re not sure you trust the advice of a junior resident previously unknown to you• You are hopeful for a surgical solution to your abdominal pain <ul style="list-style-type: none">• You think there may have been a medical error – you need some answers• This poses a significant disruption of expected care needs• You had not planned to have the patient stay with you during his recovery and you worry about increasing your exposure to COVID-19

simulated patient (SP), followed by group debriefing and feedback. A final group reflection on simulation challenges and feedback from the SP and peer/faculty observers on student performance generated lessons learned and best practices in telemedicine communication.

Students performing the role of a surgical resident were instructed to “pin” the SP’s video to minimize distractions from their computer. Everyone else “left” the room by turning off their microphones and cameras, but observed the encounter. After each scenario ran approximately 15 minutes, everyone “returned” to the class by turning on their cameras and microphones.

Data collection included (1) ratings of demonstrated skills using the Communication Assessment Tool¹⁶; (2) pre- and postcourse skills confidence levels using evaluations in Appendix B; (3) video-recordings and field notes taken by AB summarized in Table 3; (4) postsession evaluation of the class on a graded scale (A ± F); and (5) group feedback regarding methods and content.

RESULTS

Five students (100% of school’s M4s matched into surgical residencies) and 4 observers attended the class that was facilitated by 2 faculty; observers included 3 medical school faculty and 1 research assistant, for a total of eleven participants. All agreed to involvement in the research study.

Curriculum Feedback

All but one student gave the class an “A+,” noting that the class introduced new skills and reinforced current ones. One offered: “I feel much more confident in my ability to function in this [video conferencing] setting [after class].” Most learners reported higher self-confidence in target communication skills following the module (Fig. 1). Students were particularly appreciative of opportunity for direct observation of skills and immediate faculty feedback (Table 2).

All students agreed that the intimate setting was unique and valuable, and recommended including such practice and feedback sessions more regularly, observing

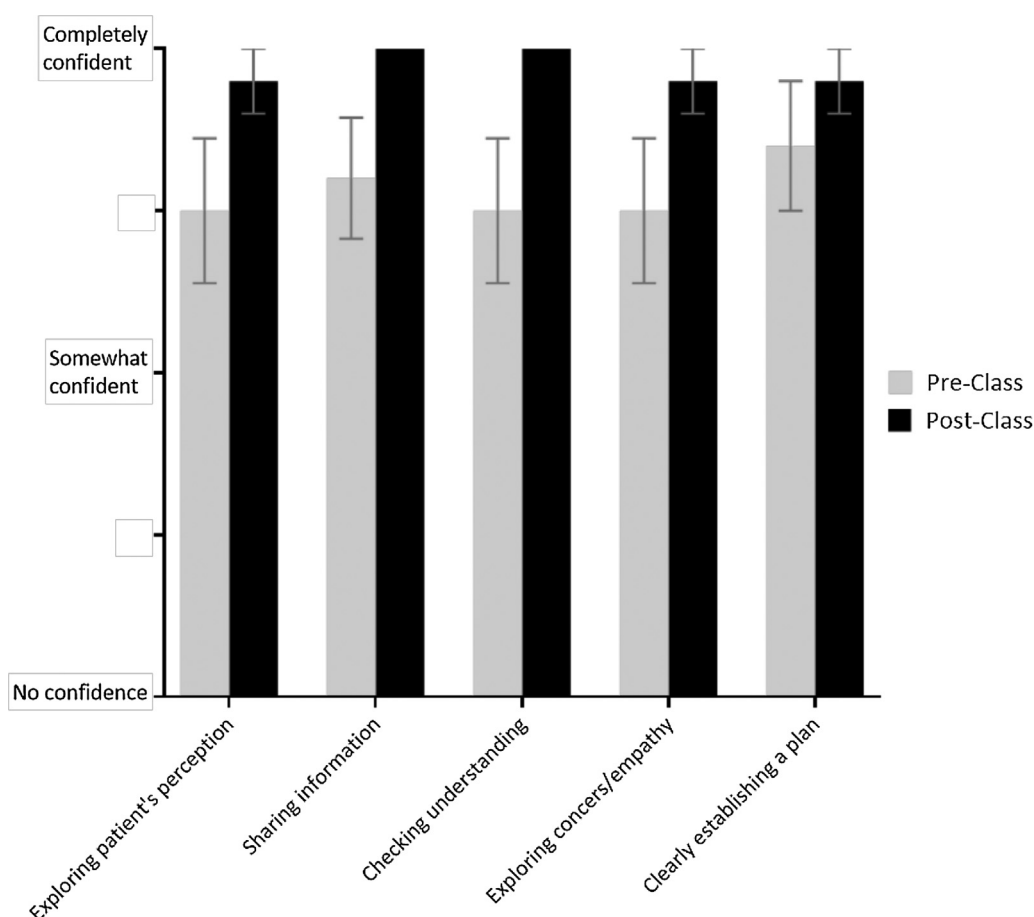


FIGURE 1. Student confidence.

TABLE 2. Student Feedback on Curriculum

"I was anticipating an unnecessary course; however, the instructors provided very insightful advice on how to approach patient encounters both in person and on video conference."

"I really enjoyed multiple surgical attendings evaluating and providing feedback on my interaction with the SP. I did not have many observed encounters during my M3 surgery rotation."

"I was nervous about the idea of using video conferencing to have a patient encounter. . . this session was really helpful in demonstrating that a productive discussion can be had. . . to address challenges of telemedicine."

"Definitely a great introduction to the new teleconferencing world!"

that in a virtual setting, "getting us students to act out the scenario was a great way to maintain focus." Receiving communication feedback from surgical attendings was a highlight, as one student "did not have many observed encounters during [the] M3 surgery rotation." The SP appreciated the minimal effort required to participate, compared to the driving, parking, and navigating a complex hospital campus required in person.

Several elements of virtual communications differed from in-person engagement, requiring increased focus to communicate empathy and concern. The group discussion identified lessons learned and translated them to best practices that were categorized by environmental and behavioral modifications (Table 3).

DISCUSSION

Educators must identify effective techniques using video conferencing platforms to teach medical communication skills during the COVID-19 pandemic. Beyond the era of social distancing, a digital communication curriculum will remain beneficial: surgical specialties have increasingly implemented video-based appointments in the perioperative period. Studies have reported comparable clinical outcomes in telemedicine and in-office postoperative visits, including a similar ability to diagnosis complications.^{17,18} Coupled with demonstrated savings in travel time, patient and healthcare system spending, and enhanced levels of both patient and provider satisfaction, telemedicine offers a promising area for further expansion within surgical care.²³

There is a need to teach specific video-based communication skills to enable surgeons to build rapport with patients and families in this distinct form of consultation. "There's really an art to providing a good video consultation that needs to be taught, just like we teach bedside manner and patient interviewing skills" explained Neal Sikka, MD, in an interview with AAMC on the growing

TABLE 3. Lessons Learned; Best Practice Suggestions

Lessons Learned

- | | |
|-------------------------------------|---|
| <i>Lighting and Positioning</i> | <ul style="list-style-type: none"> • Poor lighting and positioning within the screen limited the physician and patient's ability to interpret each other's facial expressions. • The "hidden" face was more distracting than if the conversation had been telephonic, hindering patient trust and physician interpretation of the patient's reaction. |
| <i>Body Movement</i> | <ul style="list-style-type: none"> • Natural and appropriate body movement was easily misinterpreted, such as when the physician looked downward to write notes or looked upward when contemplating her response to the patient. • The patient was uncertain whether the physician's focus was still on the conversation or if something else in the room had distracted him/her. |
| <i>Use of Silence</i> | <ul style="list-style-type: none"> • The physician's silence — an important technique communicating empathy and focus on the patient — was also thought to signal a distraction. |
| <i>Increased Sense of Intimacy</i> | <ul style="list-style-type: none"> • As the physician looked directly into the camera, the patient described the experience as "intimate" and "comforting," as if he was the physician's sole focus. • In-person simulations frequently include peer observers, and those engaged in the role play are continually aware of their presence. Despite the "presence" of virtual (unseen and unheard) observers, both parties found it easy to feel alone with and fully focused on the role-play partner. • Observers appreciated being able to experience the encounter exactly as the patient or physician did, without being seen or heard. |
| <i>Best Practices Environmental</i> | <ul style="list-style-type: none"> • Arrange favorable lighting behind the computer, such as a ring light or natural lighting, reducing shadows on their face. • Dress professionally and position the computer camera to capture the full-face mid-screen. • Limit distracting clutter behind the speaker, visible to the viewer. |
| <i>Behavioral</i> | <ul style="list-style-type: none"> • Ensure that all movement is intentional, including looking up or down as the patient speaks. • "Narrate" behavior to minimize misinterpretation: request permission to |

(continued)

TABLE 3 (continued)**Lessons Learned**

- take notes, punctuate quiet listening with verbal encouragements.
- Add simple statements such as “Let me think just a moment” to give the patient confidence your continued focus.
 - A patient’s distress may be more difficult to interpret on video; ask direct questions to understand the patient’s emotional state.

need for telemedicine training in medical school.¹⁹ Students must learn to convey empathy and attention when a video screen separates them from their patients.

Similar to our own analysis, others note that higher camera resolution and bandwidth allowed better clinician recognition of facial affect.²⁰ The decreased ability for eye contact and physical touch seems to be mitigated by clinician use of “real time feedback” as a method of emotional support, similar to our observation that increased vocalization by a student interviewer demonstrated her attention to and emotional involvement in a patient’s story.²¹ Medical educators, referencing these differences in the ability to build relationships virtually, have called for a “digital empathy” curriculum and increased practice in telemedicine settings.^{22,23}

Our training plan appeared effective at engaging learners and improving skills and confidence when communicating virtually with patients. Students reported that skills practice with SPs, coupled with immediate feedback, had the greatest impact on their learning. This approach required few resources: the SP was a volunteer with acting training, and the faculty were familiar with communication theory and practice. As this is a report of a single class piloted to a small number of medical students, generalizability of our findings is limited. We plan continued testing of this curriculum, and to expand simulation practice with faculty feedback to surgical residents during the COVID-19 crisis.

CONCLUSIONS

Telemedicine offers a promising area for further expansion within surgical care, and there is a need to teach video-conference specific communication skills to enable surgical teams to build rapport in this distinct form of consultation. Our training plan appears effective at engaging learners and improving skills and confidence, and identifies areas of focus when teaching virtual communication skills.

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SUPPLEMENTARY INFORMATION

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